

249 Market Str

P.

#18

1895—

in some respects good & in general
satisfactory —

Paper March 16 1828

Inaugural Essay

on

Bilious Colic

by

Charles Darrah

of

Pennsylvania

Philadelphia Sep. 1825.

Apr 11 1851

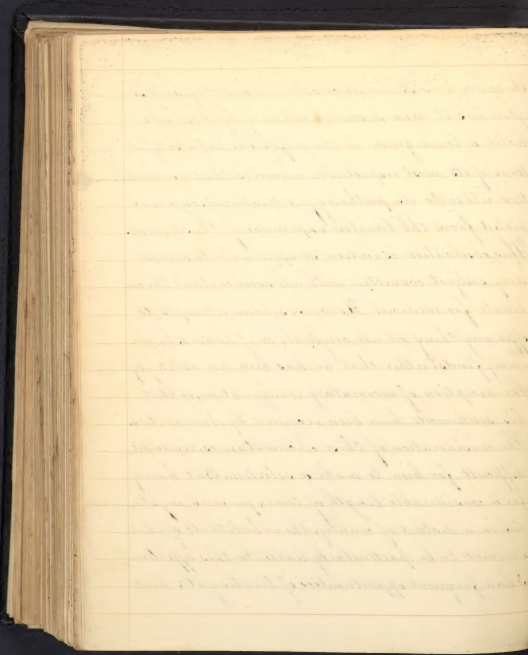
Impress 1/2

1/2

1/2

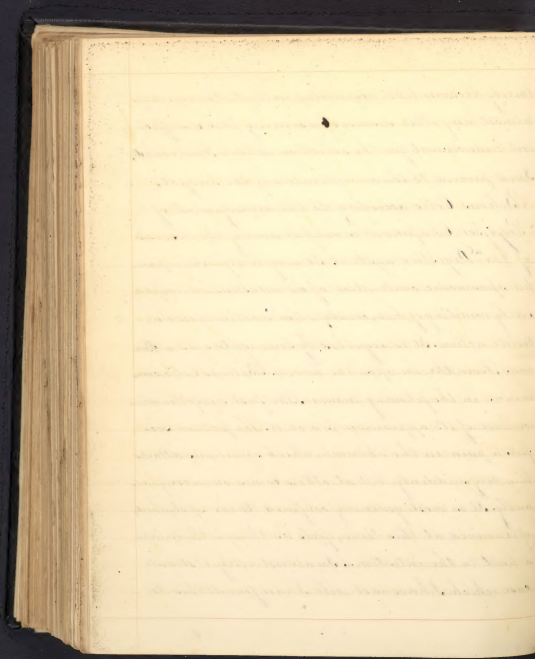
Impress 1/2

So common is Bilious Colic to our country, and so often has it been described, not only by those who hold a lower grade in the professions, but also by some of its most respectable members, that no addition either to its pathology, or treatment, can be expected from the limited experience of the student. This observation is indeed so applicable to almost every subject connected with our science, that the candidate for medical Honours, seldom attempts to offer any thing at all original; or if he does, he generally finds, either that he has been led astray by the deception of momentary imagination, or that his sentiments have been recorded by other writers. The consideration of these circumstances, render it difficult for him to make a selection. But having for a considerable length of time, pursued my studies in a district of country, the inhabitants of which appeared to be particularly liable to this affection I had frequent opportunities of treating it; and

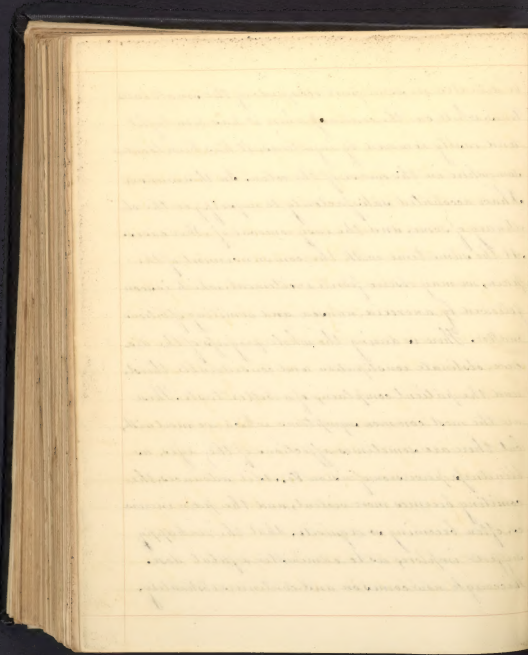


thereby became better acquainted, with it, than perhaps almost any other disease. Considering this, a sufficient inducement for the selection which I have made, I will proceed to the consideration of the subject.

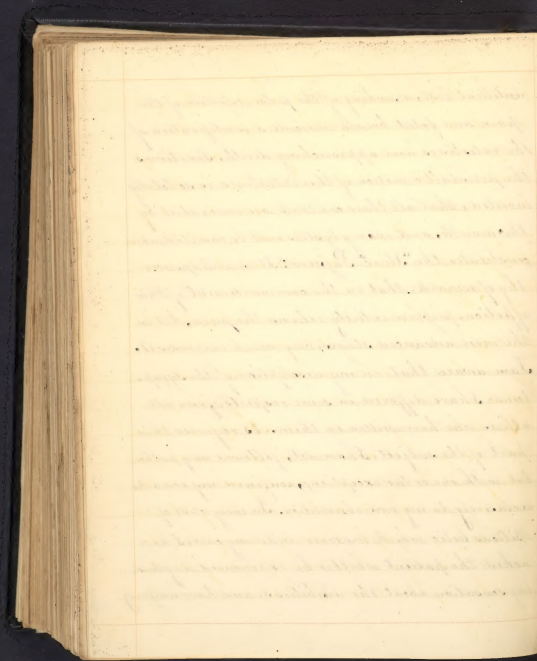
Bilious Colic, according to the arrangement of "Professor Chapman", is ranked among the diseases of the "Digestive system". It may be defined, a painful spasmodic contraction of an intestine, accompanied by vomiting of bile, constipation and increased arterial action. It is regarded by some writers, as a Bilious Fever thrown upon the bowels. Bilious Colic commences in the following manner. The first symptom which we have of its appearance, is a chill. The patient soon feels a pain in the abdomen, which sometimes attacks him very suddenly, but at others comes on more gradually. It is most generally confined to one spot, which, if examined, at this time, feels as though there were a knot in the intestine. In almost every obstinate case which I have met with I have found this to



be situated in some part occupied by the small intes-
tines, while on the contrary where it has been light
and easily removed by injections, it has been located
somewhere in the course of the colon. In this manner
I have accounted satisfactorily to myself, for the ob-
stinacy of some, and the easy removal of other cases.
At the same time with the commencement of the
pain, we may observe febrile excitement, which is soon
followed by anorexia, nausea and vomiting of bilious
matter. There is during the whole progress of the dis-
ease, obstinate constipation and considerable thirst,
and the patient complains of a bitter taste. These
are the most common symptoms which we meet with,
but there are sometimes affections of the eyes, as
blindness, perversion of vision &c. As it advances, the
vomiting becomes more violent, and the pain increas-
es, often becoming so exquisite, that the unhappy
sufferer imploring us to administer a fatal dose.
This cough now comes on and continues obstinately.



untill at last, a sinking of the pulse; cessation of the
pain and foetid breath indicate a mortification of
the intestines and approaching death. Sometimes
the peristaltic motion of the intestines is so totally
inverted, that all their contents are evacuated by
the mouth, and even glysters will be vomited, which
constitutes the "Siliac Passion." It is perhaps wor-
thy of remark, that in the commencement of this
affection, opium entirely relieves the pain, but in
the more advanced stages, very much increases it.
I am aware that in my description of the symp-
toms, I have differed in some respects, from all
others who have written on them. As regards this
part of the subject, I have not, followed any author,
but with one or two exceptions, confined my remarks
exclusively to my own observation. In every case of
Bilious Colic which has come under my care, I have
asked the patient whether he experienced any twist-
ing sensation about the umbilicus, and have uniformly



received the same answer, that he did not. This fact may appear singular, but it is no less true. This symptom as far as my knowledge extends, is always present in Flatulent Colic. I don't presume to uphold any opinion of my own, in opposition to that of the experienced Physician, or to assert, that there is not generally a painful sensation about the navel, but merely state what has occurred to me.

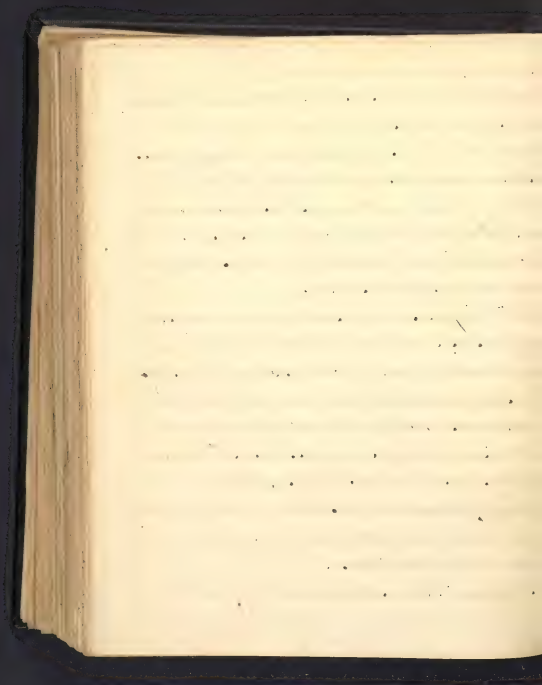
The causes which produce it, are various, but the most common are indigestible food, a redundancy of acrid bile, long continued costiveness, hardened faeces, and the external application of cold, particularly to the inferior extremities. It appears to me, that these two last conjoined; the former as a predisposing, and the latter as an exciting cause, are the most frequent agents in the production of this disease. We may very often learn by enquiry that the patient has only a short time preceding the attack, been exposed to cold, and I have in several



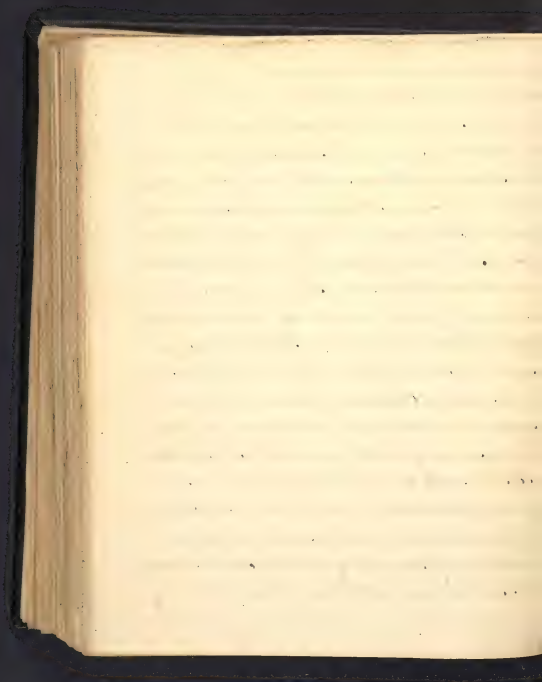
instances, known the spasm to subside and all unpleasant symptoms disappear, immediately after the evacuation by glyster, of a hardened lump of feces. In such cases, it is probable that the feces by remaining too long in the intestines, produce a pre-disposition and that the cold excites a spasmodic contraction, by which the former is grasped, and the passage thus closed.

The "Diagnosis" may be stated in a few words. The only diseases with which it can be confounded, are the other bowel affections. It may be distinguished from these, by the chill with which it commences and the high arterial action which attends it during its progress. These I believe are always present in this disease, but never in the others of the same kind. There are also symptoms peculiar to each of the other forms, which will aid in the distinction.

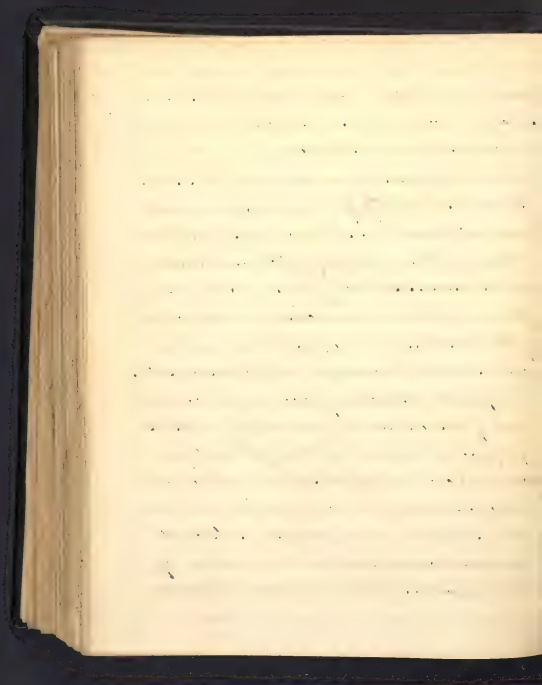
"Prognosis" Bilious Colic is never to be reckoned



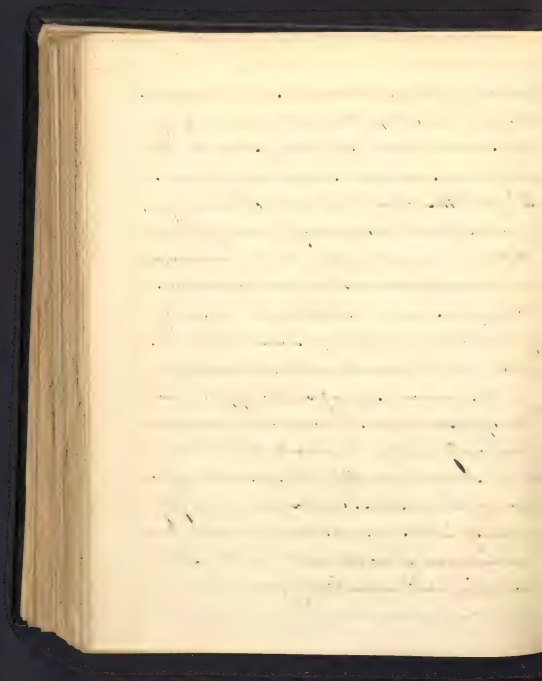
void of danger, as it may unexpectedly terminate in
gangrene. There are however symptoms, which may
be regarded as favourable. When the irritation of
the stomach subsides, so that we may have an op-
portunity of administering our remedies, when the
patient experiences a rumbling sensation in the ab-
domen, like that produced by the operation of med-
icine or when there is a discharge of faeces, follow-
ed by a relief of the pain, we may have reason to ex-
pect a favourable termination. On the contrary, a
sudden cessation of pain, while the costiveness re-
mains obstinate, cold sweats, a sinking pulse,
syncope and hiccough denote that mortification
and consequently death is near at hand. The *Shi-
a* *Rapion* is to be considered highly dangerous. The
usual appearances to be observed on dissection, are
inflammation of the intestines, with a spasmodic
constriction of some part of the tube or *intus Suscep-
tio*. In the treatment of this disease the recovery



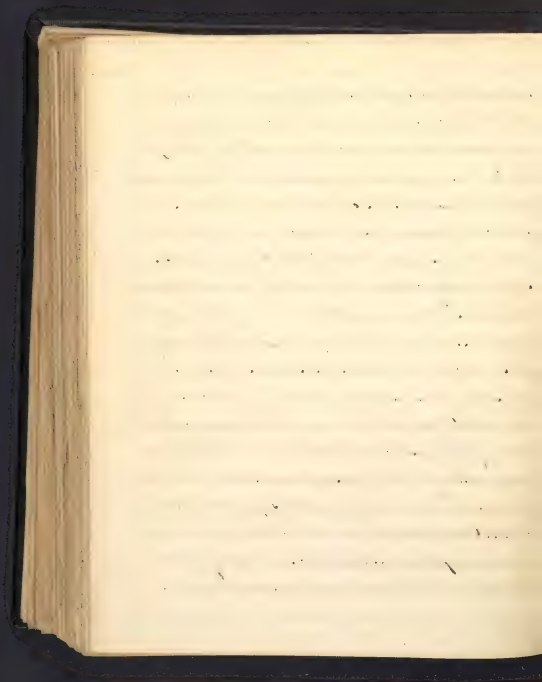
must ultimately depend on the removal of the spasm. In order to accomplish this it is necessary to evacuate the contents of the intestines, and to remove the morbid irritability existing in that part of the system. But to preserve the life of the patient from the most imminent hazard, it is still more necessary to prevent and remove those inflamm^{atory} affections, which occur in this disease. As the chief danger in Colic arises from an inflammation and consequent mortification of the intestines, it will always be proper when the case is violent to commence with copious venesection. The prompt abstraction of blood in the commencement of this disease, very often entirely arrests its progress. We may draw off twenty or twenty-five ounces at once with perfect safety and decided advantage. But even if we don't gain all that has been stated, we guard against subsequent inflammation, and facilitate the operation of the medicines. If there is no material alteration



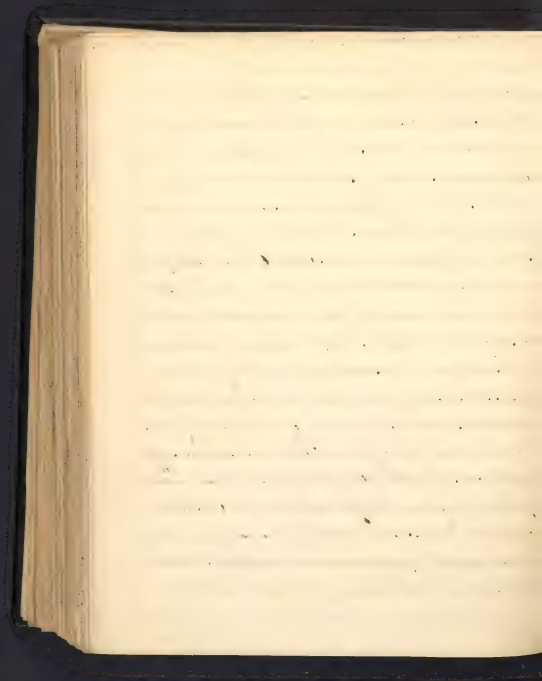
produced by the first bleeding, it should be repeated. We should next attempt to calm the irritability of the stomach, which is frequently so great that every thing swallowed is immediately rejected. To effect this object lime water, opium, anodyne injections, flannel wrung out of a warm fluid or bottles of warm water applied to the abdomen, and numerous other remedies have been recommended. When opium is used, it should be given in form of pill which has been kept for a considerable time. But of all the remedies which I have employed for this purpose is an Epispastic, applied over the Epigastric region. The warm bath is sometimes beneficially employed to mitigate the irritability of the stomach, and allay the spasmodic affection of the intestines. Emetics have been highly spoken of in this disease. Where there are large accumulations of acrid matter in the stomach, they will undoubtedly prove - - -



serviceable, but as a general rule, they are not at all applicable, they increase the irritation which is already too great, and add very much to the distress of the patient, it is urged in their favour, that they produce general relaxation. This cannot be denied, but the same end can be accomplished much more effectually, and with less pain to the patient by enemas. After having checked the vomiting incident to Colic, we have still an important and difficult object before us. we are now to make use of all our efforts to open the bowels as soon as possible. The necessity of this is urged, not only by the cries of the patient for relief, but also by the tendency to a return of the gastric irritation, and the liability to gangrene. For facility of description, I shall divide the remedies which are employed for this purpose, into three classes. Cathartics, those which are given per anum, and external applications. Cathartics. In treating of these articles in the disease under consideration, it is



difficult to say which one has the strongest claims to our attention. In one case we find that the most drastic purgatives are requisites, while in another which in appearance is precisely similar, the mildest laxatives are far superior in efficacy. But, as I have had reason to prefer those which are not of a very active nature, I will commence with them. Castor Oil is used, often or perhaps, in solid than any other medicine. But to derive any advantage from it, we must be careful to select that which is least disagreeable to the patient, and give it in small and frequently repeated doses. It is usually taken either alone or with water, or wine, but I think a better way of administering it, is to pour it on hot coffee and drink as soon as sufficiently cool. The Olive Oil being less offensive, would probably be found beneficial, where the Ol. Ricini cannot be taken. As the latter however is more active, it is generally preferred, when admissible. The Neutral salts are also among the most valuable



Cathartics, in this affection. The Sulphate of Magnesia, which is one of the best, is said to be particularly applicable to all diseases which are attended with gastric irritation, so much so, that it has frequently been known to remain in the stomach after every other article had been rejected. Among the more active purgatives generally given in this disease, are Calomel, jalap, Rhubarb, Gamboge, Scammony, Senna &c. These may be administered either alone or combined with each other. A favourite prescription of Professor Chapman is Calomel and opium united. In cases of great danger, two or three grains of the latter with twelve or fifteen of the former, may be given every three or four hours. He says "by uniting the medicines, we obtain a great advantage. As soon as the opium begins to act, the spasmodic contraction will generally give way, and the Calomel being thus suffered to operate, produces copious evacuations of the bowels and the disease is entirely removed. The Calomel is also more apt to be

at 24 Anna leaves 30s

Cream of Tartar 3s

Kanna - - 3ss

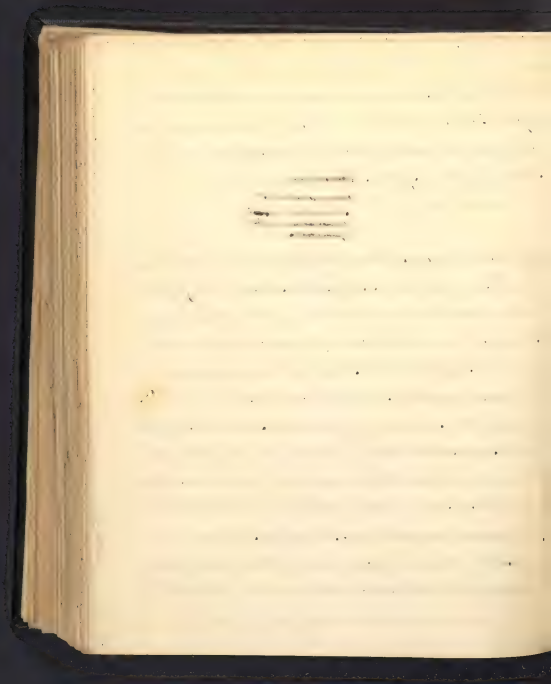
Boiling Water 6s

Make an infusion

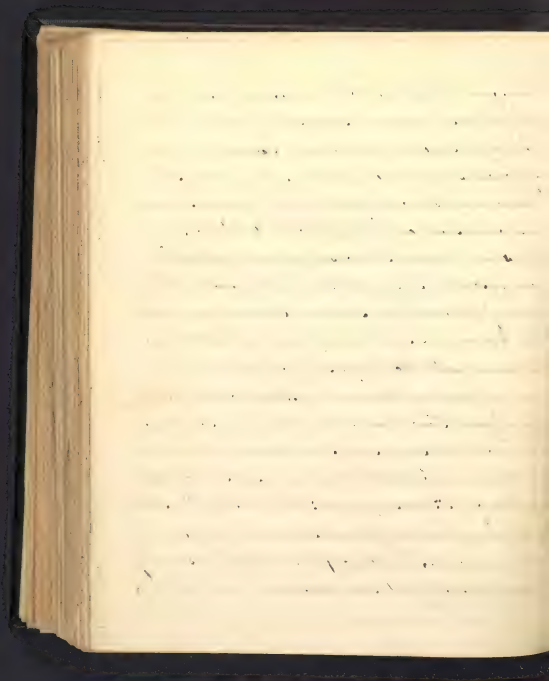
retained on the stomach, when used in conjunction with
Opium. It is a common practice among medical men of the
country, to give a combination of Senna, Manna, and Emeric
Tartar, prepared as follows ~~as follows~~

~~Take of Senna ʒij~~
~~Manna ʒij~~
~~Emeric Tartar ʒij~~
~~Divide into 4 equal parts~~

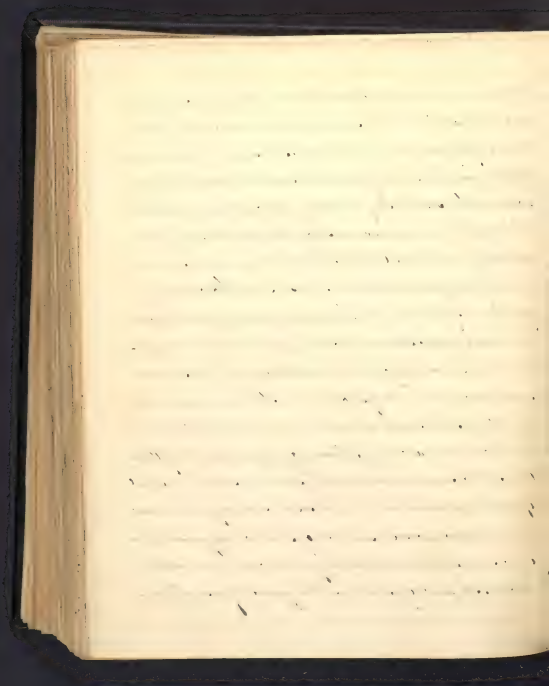
Of this a wine glass full may be given every ten or fifteen min-
utes. This very often proves successful, as does also the juglans
Cathartica either alone or united with the Chloride of
Mercury. There are other cathartics which may be employ-
ed in this affection, but I believe I have enumerated
the most important. Some practitioners have recom-
mended the swallowing of gold and silver balls or pills,
on the supposition that by their weight, they would force
themselves through the contracted part of the intestine;
but these seem much more likely to create, than
to remove an obstruction. It appears to me im-
possible that they can act by their gravity, be-
cause the intestines do not lie in a straight



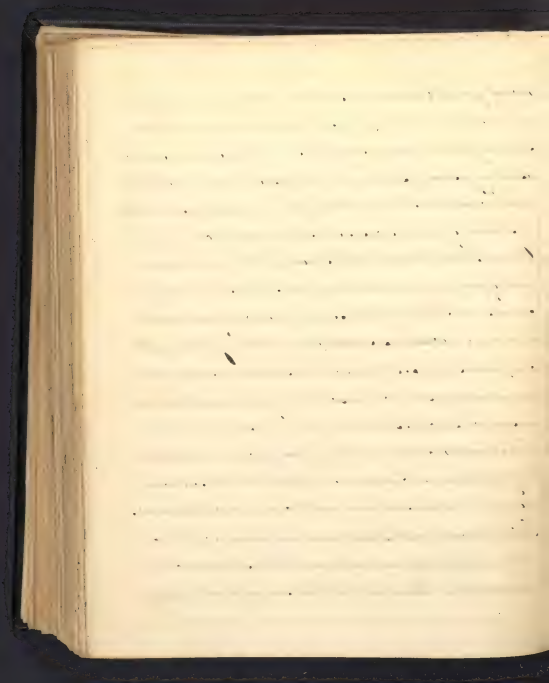
line, from the pylorus to the anus, and ^{if} this were actually the case, we cannot suppose the weight of a ball as large as a man could swallow, would prove very efficacious in removing either a spasmodic constriction, or an obstruction from any other cause. The same observations are equally applicable to Quicksilver. There are however some cases on record, particularly one by Mr. Wm. Perry published in the sixteenth volume of the Edinburgh Medical Commentaries in which the Hydrargyrum swallowed in great quantities, was attended with the happiest effect, after every other remedy had been tried in vain. I have been informed by different Practitioners that they had sometimes met with the same success in this remedy, but none of them have been able to give any satisfactory explanation of its "Modus Operandi". Were the stricture situated in a portion of the intestine, the direction of which was downwards, the Quicksilver, acting by its gravity, might possibly effect some good, but if on the contrary,



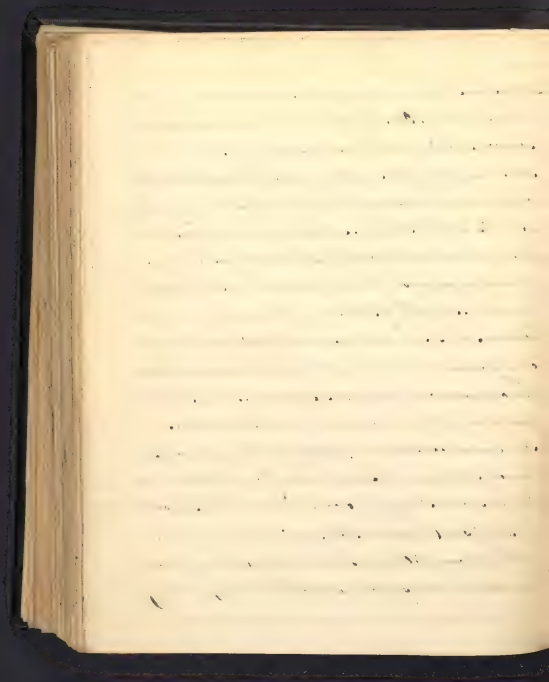
it were to meet with the contraction while passing upwards, it could not, to speak in the most favourable terms of it, be of any advantage. It is a very popular opinion in the country, that this article administered even in the smallest quantity, will certainly either run through the bowels, or destroy the patient, in fifteen or twenty minutes. On this account, you can seldom induce any one to take it. This is not however, any great misfortune, for the remedy don't appear to promise much good. It will also be proper while using Castor Oil, or even before if the irritation of the stomach should continue long, to administer mild aperient injections. These are almost innumerable but the most common are the following: equal parts of Olive Oil, Nalafes, and muriale of soda dissolved in a pint of water, or milk, half a pint, Nalafes, half a pint and Laud three ounces, or Sulphate of Soda or Magnesia three ounces dissolved in a pint of water, or warm water alone. A pint of fluid is the quantity usually di-



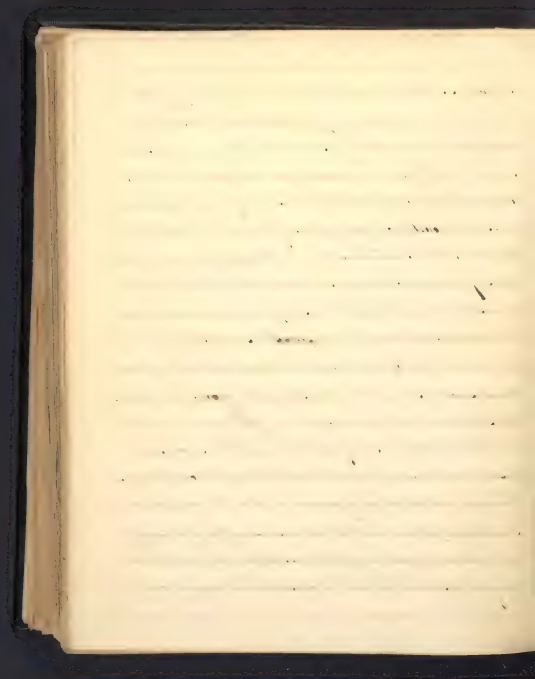
rected for an Emema; but I think it might generally be increased with advantage. If those above enumerated should fail, we may use of others which are more active; as an infusion of Senna and Jalap, Senna and Rhubarb or all combined. The injection of Turpentine has been highly spoken of in this case. It is prepared by combining Oleum Turbinthin^a a table spoonfull the white and yolk of one egg and water one pint. This is even more efficacious in Flatulent Colic. A pint or more of cold water or even ice water is said to have been injected with complete success. After all these remedies have failed, we may resort to the Tobacco injection, either by infusion or smoke. To prepare the infusion, pour a pint of hot water on one drachm of the powdered leaves, one half of which is to be administered at a time. A common pipe will answer very well to administer the smoke. Fill the bowl with Tobacco, and inflame it; then cover it with a rag, and introduce the stem into the rectum, blow through the bowl. A particular appa-



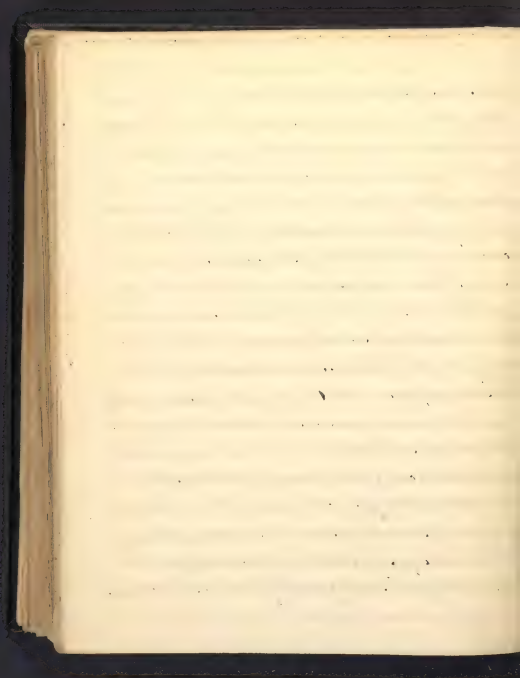
ratus has been invented for this purpose, but cannot always be had. It should however be recollected, that Tobacco should never be used, excepting as a dernier resort. The powerfull sedative effects of this article, have been known to destroy the patient almost immediately after its administration. Mr. Earl of London, has proposed the introduction of a suppository as a means of guarding against the danger which arises from the injection. A quill of Tobacco may be deposited in the rectum, it is said, with as much effect, as the smoke or infusion, and may be withdrawn immediately on the appearance of dangerous symptoms. This statement has been fully corroborated by other Practitioners. An Enema constituted of twenty or thirty grains of tartarized Antimony dissolved in half a pint of warm water, has been strongly recommended in this disease, by Professor Chapman. He says "when the effect is full and complete, an extraordinary degree of muscular debility takes place, without, however, producing,



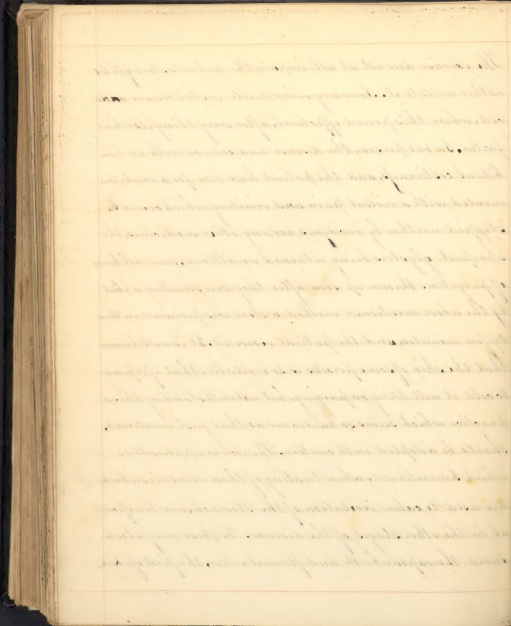
so far as I have observed, any permanent mischief." It has given it in the quantity of a drachm and has succeeded with it after every thing else had been tried in vain. I have seen it employed in two cases, from the result of which, am inclined to believe, that it is one of the very best remedies. In one instance forty grains of it were injected to relieve the pain, which notwithstanding the use of very large quantities of opium, continued so violent, that it threatened to destroy the patient, but disappeared immediately after the administration of the glyster. It is necessary to bear in mind, that like Cathartics, the mildest Enemata will sometimes succeed, when the more stimulating ones have failed. We should not therefore despair of effecting a cure, when we have tried one set of remedies without success, but resort to others and run through the whole catalogue. The mere introduction of a candle into the rectum, will sometimes put an end to the disease, after it has baffled us in all our preceding attempts. Mechanical dilatation may be resorted to, with a considerable degree of confi-



dence. The safest, and best, method, is to inject a large quantity of tepid water, by a proper syringe, which will throw it into the rectum in a continued stream, and with some force, the patient drinking copiously at the same time. From one ^{to} two gallons have been, thrown into the intestines and half a gallon, drunk with the happiest effects. Before concluding the treatment of Bilious Colic, I have only to speak of those remedies which are applied externally, for the purpose of evacuating the bowels. Cold water dashed on the extremities or abdomen was a favourite prescription of the late Dr. Rush. A method somewhat similar has been proposed in the Edinburgh Medical Commentaries, which in many cases has been known to be of service. The patient is to be taken out of bed, and made to walk about on the cold floor of a damp apartment. At the same time, porringers of cold water are to be dashed on his feet, legs, and thighs; and this must be continued for an hour, or longer, if a stool be not procured before that time, though this will generally be the case much sooner.



The exercise does not at all impair the patients strength but rather adds to it. Some very remarkable instances are adduced, where this proved effectual, after every thing else had failed. In one person, the disease had come on with an habitual costiveness, and the patient had been for a week, tormented with a violent pain, and vomiting, which could be stopped neither by anodynes, nor any other medicines, the sharpest glysters being returned, unaltered; and all kinds of purgatives thrown up soon after they were swallowed; but by the above mentioned method, a stool, was procured in thirty-five minutes, and the patient recovered. It is well known that the skin of some persons, is so irritable, that if exposed to cold it will bring on purging, but notwithstanding this a practice which seems so hazardous as that just mentioned, should be adopted with caution. The warm applications which I mentioned, when treating of those remedies which are used to calm irritation of the stomach, are beneficial in the other stages of the disease. To these may also be added the vapour-bath and flannel roller, the first of which,



is highly serviceable. A Blister large enough to cover the whole abdomen will sometimes succeed in arresting this disease.

Should all the remedies which I have enumerated fail we have still one resort. Mercury urged to salivation will frequently snatch the patient from the apparent grasp of death. There has several cases come under my notice, where the disease was very obstinate, but as soon as ptyalism had taken place, the unpleasant symptoms disappeared. I have never seen a ~~case~~ terminate fatally where the mouth became sore in consequence of the use of Mercury. Much might be said of the utility of this medicine in Colic, but to ensure its employment, it is necessary only to mention that among its advocates are Professors Chapman and Physick. Those who are subject to attacks of the Colic should cautiously abstain from all kinds of crude, flatulent food, and from fermented liquors; they should also avoid, as much as possible, any exposure to wet and moisture, taking due care to obviate costiveness by a timely use of some gentle laxative.

This image shows a blank, aged, cream-colored page, likely an endpaper or flyleaf from an old book. The paper has a slightly textured appearance with some minor discoloration and faint smudges, characteristic of old paper. A small, dark, irregular mark is visible near the center of the page. The left edge of the page shows the binding of the book, with some of the adjacent page visible. The overall tone is warm and slightly yellowed, consistent with the age of the document.